



REMR MATERIAL DATA SHEET CM-SE-1.70

ElastoColor

1. NAME

ElastoColor

- Allow the sealant in repaired cracks 2 hr minimum for curing before applying the coating.

2. MANUFACTURER

Sika Corporation
P.O. Box 297
Lyndhurst, NJ 07071
Telephone: 201-933-8800

- Allow sufficient time for the substrate to dry after rain or other inclement conditions, as this could cause bonding problems.

3. DESCRIPTION

ElastoColor is a one-component, water-based, non-vapor barrier, 100-percent acrylic emulsion coating. It produces a continually flexible, dampproofing, protective, and decorative coating. ElastoColor is packaged in 5-gal plastic pails.

5. MANUFACTURER'S TECHNICAL DATA

The manufacturer reports the following advantages of this coating:

4. USES AND LIMITATIONS

Uses: Use as a coating for masonry, concrete, stucco, and exterior insulating finishing systems.

Limitations:

- The substance must be dry prior to the application.
- The product must be protected from freezing. If frozen, discard.
- Do not thin.
- The product is not designated for use as a traffic-bearing surface.
- The minimum age of concrete prior to application is 21 to 28 days.

- Bridges hair-line cracks, allowing movement.
- Ready to use.
- Easy application by brush, roller, or spray.
- High elasticity, excellent elongation.
- Alkaline resistant - no primer needed.
- Exceptional adhesion to concrete and masonry.
- Non-vapor barrier.
- Non-toxic.
- Remains permanently flexible at extreme cold and hot temperatures.
- Excellent durability.
- Ultraviolet resistance.
- Decorative finish - available in four colors. Special colors upon request.
- Resistant to dirt pick-up and mildew.

Technical data:

Shelf life: 1 year in original, unopened containers.
Color: Colonial white, precast gray, capitol tan, white. Special colors also available on request.
Viscosity: Approx. 4,000 cps.
Pot life: Indefinite, provided proper care is taken in protecting the system from moisture, freezing, or contamination.
Curing rate: Initial tack-free time is 2 hr. Final cure is less than 24 hr.
Tensile properties
(ASTM D 412): Tensile strength -- 100 psi
Elongation at break -- 150%
Abrasion (Tabor)
H-10 wheel, 1,000 g load: Tensile strength -- 1.70% weight loss @ 500 cycles
Weathering: Excellent

6. MANUFACTURER'S GUIDANCE FOR APPLICATION

Surface preparation: All surfaces to be coated must be dry, clean, sound, and frost-free with curing compound residues and any other foreign matter removed. Preparation work must be done by mechanical equipment, sandblasting, waterblasting, etc.

Mixing: Stir thoroughly to ensure uniformity. To minimize color variation, blend two pails of ElastoColor. Use one pail and maintain the second pail to repeat this procedure (boxing) for the entire application.

Application: The recommended application temperatures are 40 to 100 °F. Apply by brush, roller, or spray over entire area moving in one direction. To obtain the proper coverage, two or more coats may be necessary. Allow a minimum of 2 hr prior to recoating. Fill all visible hairline cracks with ElastoColor prior to applying to the entire surface. Wider cracks should be patched with Sikaflex-1a (sealant). Allow 2 hr for curing of Sikaflex-1a before coating with ElastoColor. Consult Technical Service for spray application techniques.

Coverage: The application rate for smooth surfaces is 80 to 100 ft²/gal (15 to 20 mils wet film). The

application rate for textured surfaces is 60 to 80 ft²/gal (20 to 25 mils wet film). All coverage will depend on the porosity of the substrate.

7. CORPS OF ENGINEERS' EVALUATION

Percent solids (ASTM D 1644, Method A)

66.5%

Water permeability of coating

Two tests were used to determine the water permeability of the coating. Test specimens were prepared by coating hollow concrete masonry units (CMU) having a density of 85.03 lb/ft³ and a water absorption of 16.7 percent, when tested according to ASTM C 140.

Inverted funnel method (WES)

One side of a CMU is coated with the material. After the coating has cured for at least 7 days, a funnel having a 5-in. (0.0127 m²) diameter opening is placed on the coated side, and the edges of the funnel are sealed with a heavy bead of silicone caulk. Once the silicone caulk has hardened, the funnel is filled with water, and the amount of water passing through the coating is measured.

Application of coating: 70 ft²/gal

Water permeability: 0.086 L/m²/24 hr

Wind-driven rain ASTM E 514 (Modified)

The test specimen was constructed by building a small wall from six of the CMUs having an area of approximately 5.3 ft². One face of the wall was then coated with the material under test. The test chamber used measured 20 by 28 in. The rate of application of water and the pressure were those specified in ASTM E 514.

No visible water was observed on the backside or within the CMU after 24 hr of testing. The application rate of the coating was 60 ft²/gal.

Accelerated weathering ASTM G 53

Test specimens were prepared by coating mortar

prisms with the material. The specimens were tested for 2,000 hr using a time cycle of 4-hr ultraviolet light and 4-hr condensation.

No blistering, peeling, checking, or color change was observed after testing.

Water-vapor transmission ASTM D 1653

Coating thickness: 0.013 in.

Test method: Method A (Wet Cup)

Test Condition: 73 °F and 50% relative humidity

Test results: 26.0 perms

Tensile strength and elongation ASTM D 412

Tensile strength: 110 psi

Tensile elongation: 95%

8. ENVIRONMENTAL CONSIDERATIONS

Reasonable caution should guide the preparation, repair, and cleanup phases of sealant activities involving potentially hazardous and toxic chemicals substances. Manufacturers' recommendations to protect occupational health and environmental quality should be carefully followed. Material safety data sheets should be obtained from the manufacturers of such materials. In cases where the effects of a chemical substance on occupational health or environmental quality are unknown, chemical substances should be treated as potentially hazardous toxic materials.

9. AVAILABILITY AND COST

Information concerning the availability and cost of ElastoColor can be obtained by writing the manufacturer at the address given in item 2 or calling 201-933-8800.

10. TECHNICAL SERVICES

Information on technical services can be obtained by writing the manufacturer at the address in item 2 or by calling 201-933-8800.